

**COMPARATIVE STUDY OF CLINICAL CHARECTERISTICS, COURSE
OF ILLNESS AND QUALITY OF LIFE BETWEEN PATIENTS WITH
BIPOLAR AND UNIPOLAR DEPRESSION**

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CERTIFICATE

This is to certify that this dissertation entitled **“COMPARATIVE STUDY OF CLINICAL CHARECTERISTICS, COURSE OF ILLNESS AND QUALITY OF LIFE BETWEEN PATIENTS WITH BIPOLAR AND UNIPOLAR DEPRESSION”** is the bonafide original work of **Dr.E.SIVABALAN** in partial fulfillment of the requirement for MD (Branch XVIII) Psychiatric examination of the **Tamil Nadu Dr. MGR Medical University** to be held in April 2011.

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DECLARATION

I, **Dr.E.SIVABALAN**, solemnly declare that this dissertation entitled **“COMPARATIVE STUDY OF CLINICAL CHARECTERISTICS, COURSE OF ILLNESS AND QUALITY OF LIFE BETWEEN PATIENTS WITH BIPOLAR AND UNIPOLAR DEPRESSION”** is a bonafide record of work done by me in the Department of Psychiatry, Government Stanley Medical College and Hospital, Chennai under the guidance of **Prof. Dr.G.S.CHANDRALEKA, M.D.D.P.M**, Head of the Department, Department of Psychiatry, Government Stanley Medical College and Hospital, Chennai – 600 001.

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INTRODUCTION

Depression is the leading cause of disability as measured by YLDs and the fourth leading contributor of the global burden of disease (DALY) in 2000. By the year of 2010 depression is projected to reach second place of the ranking of DALYs calculated for all ages, both sexes. Today depression is already second cause of DALYs in the age category 15-44 years for both sexes combined. (WHO)

Major depressive episodes are characteristic of both major depressive disorder and bipolar disorder. Distinguishing between both disorders is essentially important because there are differences in the optimal management of these conditions. Anti depressant treatment of bipolar depression can adversely affect long term prognosis by causing destabilization of mood and more frequent depressive episode, and can lead to treatment resistance.(Greek et al 2005).

Most people with bipolar disorder experience depression rather than mania in their first episode of illness. The SANE report in Australia found that over two-thirds of people with bipolar disorder were misdiagnosed, most common alternative diagnosis were major depression (60%). It is clinically desirable to recognize, or at least suspect, bipolar depression at an early stage of a bipolar illness (Burden).

A number of studies have attempted to distinguish the phenomenology of depression in MDD and bipolar disorder. In bipolar depression, a greater prevalence of atypical features or reverse neuro vegetative symptoms was reported by most studies but not all (Roy H Perlis). Likewise a greater prevalence of melancholic symptoms among bipolar depressed patient was identified in several reports. Finally family history of bipolar disorder, early age of onset, shorter duration of individual episode, frequent episodes, irritability, anger, sub threshold mixed symptoms such as over activity and psychosis have also been associated with bipolar depression.

Regarding suicidal ideation and quality of life relatively very few studies comparing bipolar and unipolar disorder for this purpose, for planning a holistic treatment it is important to know how these two conditions would impact on patient's quality of life and subjective well being.

In Indian setting there is very few studies comparing bipolar and unipolar depression for phenomenology and quality of life.

Our purpose of this study is to compare socio demographic profile, clinical characteristics, and quality of life between patients with bipolar and unipolar depression at psychiatry outpatient clinics in tertiary care hospital.

REVIEW OF LITERATURE

Mania and depression have been seen as distinct, yet related, phenomena since ancient Greece (Angst & Marneros, 2001). Only in recent history have mood disorders been divided into syndromes of mania and depression. Psychiatric nosology since the DSM-III has classified major depressive disorder separately from bipolar disorder, defined by presence of mania. With the move to distinguish bipolar disorder from unipolar depression, substantial changes were made in the categorization of depression that accompanied mania.

Depression and mania with in bipolar disorder were viewed as part of a unitary illness, reflecting dysregulation along a single dimension. This Unitarian view of bipolar disorder codified a distinction between bipolar depression and unipolar depression, even though episodes of depression common to bipolar and unipolar disorders. This assumption that bipolar and unipolar depressions are distinct has continued to guide research for almost for 30 years.

Given the increase in available evidence, it appears wise to question whether this bipolar-unipolar distinction, as it applies to depressive episode, continue to garner support. That is, do depressions with in bipolar disorder reflect unique disease process compared to

depression with in unipolar disorder? Indeed, a recent biological review has suggested that it may be more fruitful to consider conceptualizing bipolar and unipolar depression as the same illness (Joffe, Young, &MacQueen, 1999).

If the model of bipolar depression as unique is true, one would expect that biological evidence would be more pronounced in bipolar than unipolar depression. As an example, one might find a strong genetic contribution to bipolar depression than unipolar depression. Second, one might expect course of disorder to differ between bipolar and unipolar depression. Third one would expect that psycho social triggers of depression would be less pronounced in bipolar than unipolar depression. That is, if unipolar and bipolar depression were different disorders, one would expect there to be observable differences in biology, course, and symptomatology, or psychosocial antecedents (Cuellar et al 2010).

I.SOCIO DEMOGRAPHIC PROFILE

Ben Alba T et al. (2006) has reported that bipolar disorders differ significantly from unipolar disorder in the following aspects: Bipolar disorder is prevalent among males (sex ratio-2), unipolar depression prevailing among females; bipolar patients were younger than unipolar patients.

Leibenluft et al, (2000) found that bipolar depression more common among women than men.

Liz Forty et al, (2008) described that the proportion of women in the major depressive group and the bipolar group were 70.2% and 71.3% respectively.

Winokur G et al, (1993) has found that in bipolar patients there is no significant difference in follow up between male and females but in unipolar patients, females were significantly more likely to have subsequent episode in follow up.

Benazzi F (2003) reports that atypical feature were significantly more common in bipolar and unipolar females than in males, bipolar females than in unipolar females, and in bipolar males than in unipolar males. Onset was significantly lower in bipolar females than in unipolar females.

Cvjetkovic-Bosnjak M et al, (1998) in his study he reported that patients suffering unipolar depression were older than patients with bipolar depression, and there were more females in this group. There were no differences in demographic characteristics.

Coryell W et al., found that group of bipolar patients more likely to be male compared to unipolar patients.

Rybakowski JK et al, (2007) study, in the group of bipolar patients significantly higher frequencies of psychotic depression in males compare to females were observed.

Gassab Let al, (2002) found onset of age early in bipolar disorder (mean age of onset 24.8 versus 34.1 in unipolar patients; $p=0.000004$).

II.COURSE OF DISORDER

In one large scale (Weissman et al., 1996) age of onset of bipolar disorder was 6 years younger than for that of unipolar depression.

Evidence from retrospective study suggests that bipolar disorder characterized by more depressive episodes than unipolar disorder (Roy-Byrne et al., 1985). Several studies suggest that bipolar depressions are shorter and quicker to onset than unipolar depression (Furukawa et al., 2000; Mitchell et al., 1992; Roy-Byrne et al., 1985).

Nevertheless, findings are not consistent in this area, with two large scale studies findings no differences in episodic length (Coryell, Andreason, Endicott, & Keller, 1987; Kessing & Mortensen, 1999).

Ahearn and Carroll (1996) reported no significant differences in episode severity as measured using symptoms interview between bipolar and unipolar depressive patients, with the exception of bipolar depressed participants exhibiting greater short term mood variability.

A comparison of currently depressed unipolar and bipolar patients revealed no differences in terms of symptom severity or social impairment (Dorz, Borgherini, Conforti, Scarso, & Magni, 2003).

In Winokur G et al 1993 study he found that chronicity was significantly more prevalent among unipolar depressed patients, bipolar depressed patients were more likely than unipolar depressed patients to have multiple episodes.

Benazzi F (2007) states that bipolar had significantly lower age of onset and more recurrences, similarly Rybakowski J et al (2007) study inform that bipolar frequently early age at onset (before 25 years) when compared to unipolar depression.

Hegerlu et al (2008) concluded patients with bipolar depression developed full blown depressive episodes significantly faster than patient with unipolar depression ($p < 0.001$).

Roy H Perlis M.D et al (2006) - age at onset of mood symptoms was about 8 years earlier for the bipolar patients than for the unipolar patients, the number of prior depressive episode was also significantly greater among the subjects with bipolar depression than with unipolar depression.

Many other studies also consistent with these findings (Solomon et al, Abrams and Taylor).

Regarding family history most of the studies focused bipolar I disorder. Gassab et al, 2005, reported that family history of psychotic disorder especially bipolar disorder strongly correlates with bipolarity, many other studies consistent with these findings (Akiskal 1993, Benazzi F, 2000; Ben Alba T, 2006; Rybakowski et al, 2004, Mitchell et al, 2001; Parker et al, 2000).

In sum, compared to unipolar depression, bipolar depression appears term mood variability. No consistent differences have been found between episode lengths, although some studies suggest a shorter episode length of bipolar depression compared to unipolar depression.

III. SYMPTOMATOLOGY

Beyond course of disorder, another comparison includes an assessment of the specific depression symptoms in bipolar and unipolar depression. Early studies indicated that unipolar depression was characterized by more typical vegetative and psychomotor symptoms than bipolar depression, such as greater weight loss (Abrams & Taylor, 1980) and initial insomnia (Brockington, Altman, Hillier, Meltzer, & Nand, 1982). In contrast, bipolar depression was associated more with atypical symptoms, such as hypersomnia (for a review, Depue & Monroe, 1978). Unipolar depression also was thought to be characterized by more affective symptoms, such as, anxiety, anger and agitation, than bipolar depression (Katz, Robins, Croughan, Secunda, & Swann, 1982).

In 1974, Venkoba Rao, states that considering the occurrence of affective disorder in the other first degree relation, the study failed to reveal any differences between unipolar and bipolar disorder.

In 1983, Akiskal et al., reported that the predictors of later emergence of bipolar disorder in unipolar patients were: onset of depression prior to 25, hypersomnia and motor retardation, a family history of bipolar disorder, medication-precipitated manic episodes and post partum depression.

In 1995, Akiskal et al, found in his 11 years follow-up study that mood lability in the depressive state was the most specific predictor of switching to bipolar disorder.

Strober et al (1993) found that those who later developed bipolar disorder were more likely to have evidenced psychosis and psychomotor retardation at the index assessment.

Gassab et al, (2002) concluded that following factors were correlated with bipolar depression: Presence of psychotic characteristics (69.8% versus 16.7%), hypersomnia (51% versus 20.3%), and psychomotor inhibition (83.3% versus 42.4%). No correlation was found between bipolar and unipolar depression was alcohol dependent and suicidal intent.

Benazzi F (2004) has found that lower age of onset and more atypical features were observed when comparing bipolar and unipolar depression.

Papadimitriou GN et al, (2002) concluded in his study that appetite loss was found to be more frequent in unipolar depression than bipolar depression (78% versus 55% $p<0.05$). No significant difference in the occurrence of sleep disturbances was found between the two groups.

Parker et al (2000) reported that by all three melancholic symptoms the bipolar patients were more likely to receive diagnosis of melancholia and of psychotic depression.

Mitchell P, et al (1992) has found that bipolar depressed patients less likely to demonstrate slowed movements than unipolar patients, there was also consistent trends on other items for psychomotor retardation to be less common and agitation to be more likely in the bipolar patients.

Roberson HA et al, (1996) states that no differences in atypical depression found between the unipolar and bipolar depressed groups. Cvjetkovic-Bosnjak M et al (1998) reports that there are no statistical differences in the intensity of depression between both types.

Rybakowski J et al (2004) have found that female bipolar patients compared unipolar depressed patients had significantly more frequently an early age of onset of depression and post partum depression. On the other end, the percentage of agitation, irritability, distractibility, thought racing and panic attacks during depression was not different in patients with bipolar and unipolar depression.

Vieta E et al, (2008) found HRSD score were statistically higher in unipolar patients than with bipolar patients. Mood, somatic anxiety, impact on work and activities, psychic anxiety, gastro intestinal and somatic symptoms was associated with unipolar depression than with bipolar depression.

Mitchel PB, Wilhelm et al, (2001) reported that although the bipolar patients were no more severely depressed than with unipolar depressed controls, they were more likely to demonstrate psychomotor retardation, melancholic and atypical features and to had previous episodes of psychotic depression.

Olfson et al (2005) found that those with bipolar depression were significantly more likely than those with unipolar depression to report hallucinations, current suicidal ideation, and low esteem, but were less likely to acknowledge disturbed appetite.

Perlis et al (2006), found bipolar depression to be associated with a family history of bipolar disorder, earlier age of onset, and more prior depressive episodes. With regards specific items from the rating scales, bipolar patients more commonly experienced fears, whereas unipolar patients more commonly experienced sadness, insomnia, cognitive difficulties, and somatic symptoms.

Solomon et al. (2006) recently found in his study that presence of delusion, number of prior depressive episode and family history of major depression strongly predict bipolar depression.

There are inconsistent results regarding severity of depression, some studies found greater severity in unipolar depression (Katz et al, Mitchell et al, Snyder et al, Hooley et al), and some found greater in bipolar depression (Goel et al, Durbin et al, Santiago et al, Hammen et al)

Beigel and Murphy (1971), Abrams & Taylor (1980), Brockington et al (1982) states that anger and aggression most commonly associated with bipolar depression than with unipolar depression.

Across all studies, there are only 4 symptoms that appear to consistently differentiate groups: people with unipolar depression have been characterized by more anxiety, activity and somatization, and by less anhedonia compared to people with bipolar depression. Although results across methodologies were not consistent, appetite loss (Gurpegui, Casanova, & Cervera, 1985) and agitation (Beigel & Murphy, 1971; Katz et al, 1982) have each been found to be more prevalent in unipolar depression than bipolar depression.

Nevertheless, results for the other symptoms are not as clear. Findings for sleep (Brockington et al 1982; Giles, Rush, & Roffwarg, 1986; Kuhs & Reschke, 1992; Mitchell et al 2001), anger (Beigel & Murphy, 1971; Brockington et al, 1982; Gurpegui et al, 1985), psychomotor retardation (Mitchell et al, 2001; Parker, Roy, Wilhelm, Mitchell, & Hadzi-Pavlovi, 2000), psychosis (Beigel & Murphy, 1971; Black & Nasrallah, 1989; Breslau & Meltzer, 1998, Brockington et al, 1982; Guze, Woodruff, & Clayton, 1975; Mitchell et al, 2001; Parker et al, 2000), melancholia (Coryell et al, 1989; Endicott et al, 1985; Parker et al, 2000) and mood reactivity (Brockington et al, 1982; Mitchell et al, 2001; Parker et al, 2000) were not consistent across studies.

IV.SUBSTANCE ABUSE AND SUICIDAL IDEATION

Ben Alba. T et al, (2006) concluded in his study that number of suicidal attempt more in bipolar disorder than in unipolar disorder (25.3% versus 23.6%)

Weinstock CM et al (2009) has found that suicidal ideation and psychomotor disturbance were more likely to be endorsed across most levels of depression severity in bipolar versus unipolar depression.

Oquendo MA, (2000) reported bipolar suicide attempters had more life time episodes of major depression compare to bipolar non attempters.

Gillaume S et al- Logistic regression analysis showed serious suicide attempt and family history of suicide are closely associated with diagnosis of bipolar depression.

Sanchez- Gustav V et al (2009), reported suicide attempters showed significantly higher rates of atypical depression and family history of completed suicide in bipolar depressed group.

Rajas M, Azzoni A et al (2004), studied 2395 suicidal attempters among them 27.5% were diagnosed unipolar depression and 38.7% were bipolar depression.

Zalsman G et al, (2006) found that maximum length of suicidal acts tended to be higher among bipolar depressed attempters compared to those with unipolar depressed attempters.

Brockington et al, (1982) found that suicidal ideation score more in unipolar depressed patients compared to bipolar patients. This result not consistent with other studies where suicidal ideation scores more in bipolar patients (Olfson et al 2005; Perlis et al, 2006).

Olfson et al (2005) has found that current alcohol use disorder more prevalent in bipolar depressive patients.

Winokur et al states that alcoholism more frequently found in the bipolar group however this difference was not significant.

Ben Alba et al 2006 found degree of substance abuse equal in both bipolar and unipolar groups (15.4% versus 14.5%).

V.QUALITY OF LIFE

Regarding quality of life most of the studies done separately in bipolar and unipolar depression, very few studies only comparing bipolar and unipolar group for this purpose.

Hema Tharoor et al, (2008) found that the mean disability scores in the bipolar affective disorder group was significantly more in social role ($p=0.038$) and in the recurrent depressive group it was more in home atmosphere ($p=0.001$). Bipolar affective group had significantly more disability in overall behavior ($p=0.002$). Recurrent depressive group had significantly more disability in assets and or liabilities ($p=0.004$) and quality of life measures did not differ significantly between both groups.

Kettar JA et al (2010) found that bipolar disorder has higher rates disability than unipolar depression.

Yatham LN (2004) have found that mean transformed scores of SF-36 were very low in bipolar patients for the social functioning, role-emotion, and mental health, patient with mild depressive symptoms had better quality of life. Further mean SF-36 scores for the bipolar sample were consistently lower compared with quality of life in unipolar depression.

Goldberg JF et al, (2005) reported subjective life satisfaction strongly paralleled global functioning, work performance and social adjustment at each follow-up for patients with unipolar non psychotic depression, but not bipolar depression or unipolar psychotic depression.

Depp CA et al found that bipolar depression was associated with substantial disability similar in severity to unipolar depression. Remission in bipolar depression was associated with significantly but incomplete improvement in functioning.

Brieger P, et al (2004), compares bipolar depression and unipolar depression by using WHOQOL BREF and found that both group reported lower QOL in all domains.

AIMS AND OBJECTIVES

1. To study the differences between bipolar and unipolar depression attending the outpatient services of a tertiary level psychiatric unit in a medical college hospital in socio demographic profile, phenomenological characteristics and course of illness.

2. To study the differences between bipolar and unipolar depression attending the outpatient services of a tertiary level psychiatric unit in a medical college hospital in quality of life.

MATERIALS AND METHODS

SITE OF STUDY:

Department of Psychiatry, Government Stanley Medical College & Hospital, Chennai.

PERIOD OF STUDY:

March 2010 to October 2010

TYPE OF STUDY: CASE CONTROL STUDY

Cases – 30 consecutive patients registered and diagnosed as bipolar depression at psychiatry department, Stanley Medical College & Hospital.

Controls– 30 consecutive patients registered and diagnosed as unipolar depression at psychiatry department, Stanley Medical College & Hospital.

CASES

INCLUSION CRITERIA

- 1) Male and female patients attending the outpatient Psychiatry department Stanley medical college hospital Chennai who fulfill DSM IV Revision criteria for Bipolar Depression
- 2) Willing to provide informed consent for the interview.

EXCLUSION CRITERIA

- 1) Uncooperative patients.
- 2) Refusal to participate in the research

CONTROLS

INCLUSION CRITERIA

- 1) Male and female patients attending the outpatient Psychiatry department Stanley medical college hospital Chennai who fulfill DSM IV Rev criteria for Unipolar Depression
- 2) Willing to provide informed consent for the interview.

EXCLUSION CRITERIA

- 1) Uncooperative patients.
- 2) Refusal to participate in the research

MATERIALS USED

SEMI STRUCTURED PROFORMA FOR SOCIO DEMOGRAPHIC DATA.

Information regarding name, age, sex education, occupation, income marital Status, family type, family history will be obtained
Information regarding age of onset of illness, duration of illness, type of depression, pre-morbid personality, physical illness, co-morbid psychiatric disorder, course of illness, previous treatments and treatment response will be obtained.

- ❖ Clinical interview for the diagnosis of type of depression will be conducted.
- ❖ DSM IV Rev criteria for the diagnosis of Unipolar and Bipolar Depression
- ❖ Hamilton depression rating scale (HDRS)

- ❖ Montgomery and depression rating scale to elicit the severity of depression (MADRS)
- ❖ Hamilton Anxiety Rating Scale
- ❖ Suicide Intent Scale
- ❖ World health organization quality of life (WHO QOL) BRFF

ETHICS

- The thesis and its methodology will be discussed and approved by the ethics committee of the research panel of Stanley medical college.
- Informed consent will be obtained from all participating patients, cases and controls.

OBSERVATIONS AND RESULTS
SOCIO DEMOGRAPHIC INFORMATION

TABLE-1

MEANS OF AGE IN BIPOLAR AND UNIPOLAR DEPRESSION

S. No	SAMPLE	AGE		SIGNIFICANCE
		MEAN	SD	
1	BIPOLAR	28	4.7	t=3.6587 p=0.0005 SIGNIFICANT
2	UNIPOLAR	32.5	4.6	

In our sample, bipolar depressive have a lower mean age compared to unipolar depression, and this difference in age statistically significant (p=0.0005).

TABLE-2**OCCUPATION**

Occupation	GROUP				Chi-square test
	BIPOLAR DEPRESSION (n=30)		UNIPOLAR DEPRESSION (n=30)		
	n	%	n	%	
Unemployed	3	10	1	3.3	Chi-square-9.8 p=0.043 SIGNIFICANT
Student	3	10	2	6.7	
Labor	5	17	15	50	
Pvt Companies	13	43	5	17	
Housewife	6	20	7	23	

This table shows that there were more people with bipolar depression (43%) engaged in private companies, whereas 50% of unipolar depression engaged as laborers.

Comparing bipolar and unipolar depression for other socio demographic information, following variables have no statistically significant association:

1. Sex
2. Marital status
3. Religion
4. Educational status

CLINICAL CHARECTERISTICS

TABLE-3

MEANS OF AGE OF ONSET IN BIPOLAR AND UNIPOLAR DEPRESSION

S. No	SAMPLE	AGE		SIGNIFICANCE
		MEAN	SD	
1	BIPOLAR	25.3	2.9	t=6.1243 p=0.0000 SIGNIFICANT
2	UNIPOLAR	31.1	4.2	

From the above table, the bipolar depression groups have early age of onset in comparison with unipolar depression group, and this result was statistically significant (p=0.000).

TABLE-4

DURATION OF CURRENT EPISODE

S. No	SAMPLE	DURATION OF CUERRENT EPISODE (IN WEEKS)		SIGNIFICANCE
		MEAN	SD	
1	BIPOLAR	3	1.4	t=8.48 p=0.000 SIGNIFICANT
2	UNIPOLAR	8.1	2.9	

In comparing duration of episode, bipolar depression has shorter duration of episode (mean duration 3 weeks) than unipolar depression (mean duration-8.1 weeks) and this result was statistically significant (p=0.000).

TABLE-5**NO OF EPISODE IN LAST 12 MONTHS**

S. No	SAMPLE	NO OF EPISODE			SIGNIFICANCE
		MEAN	SD	MEDIAN	
1	BIPOLAR	1.7	0.75	2	t=5.757 p=0.0000 SIGNIFICANT
2	UNIPOLAR	0.6	0.67	0.5	

Bipolar and unipolar depression groups were compared for number of episodes in last 12 months, the bipolar depression had median of 2 episodes in the last year, and in unipolar depression current episode is the one they experience in the last year. This result was statistically significant ($p=0.000$).

TABLE-6**FAMILY HISTORY OF MENTAL ILLNESS**

S. No	SAMPLE	FAMILY H/O MENTAL ILLNESS		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	15	15	Chi-square-16.705 p=0.000
2	UNIPOLAR (n=30)	1	29	SIGNIFICANT

This above table reveals that fifty percent of the bipolar depressive have a family history of mental illness when compare with unipolar depression and this result was statistically significant (p=0.000).

TABLE-7**POST PARTUM ONSET**

S. No	SAMPLE	POST PARTUM ONSET		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	9	21	Chi-square-7.68 p=0.006 SIGNIFICANT
2	UNIPOLAR (n=30)	1	29	

In comparison with unipolar depressive (3.3%), more bipolar depressive (30%) have post partum onset and this difference found to be statistically significant (p=0.006).

TABLE 8**ATYPICAL FEATURES**

S. No	SAMPLE	ATYPICAL FEATURES		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	15	15	Chi-square-11.42 p=0.001 SIGNIFICANT
2	UNIPOLAR (n=30)	3	27	

Fifty percent of the bipolar depressive individuals exhibit atypical clinical features in comparison with only 10 % of unipolar depressive persons exhibit atypical features, and this difference found to be statistically significant (p=0.001).

TABLE 9**MELANCHOLIC FEATURES**

S. No	SAMPLE	MELANCHOLIC FEATURES		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	14	16	Chi-square-4.800 p=0.006 SIGNIFICANT
2	UNIPOLAR (n=30)	6	24	

Nearly 50% of the bipolar depressive individuals exhibit melancholic clinical features in comparison with only 20 % of unipolar depressive persons exhibit melancholic features, and this difference found to be statistically significant (p=0.006).

TABLE 10**PSYCHOTIC FEATURES**

S. No	SAMPLE	PSYCHOTIC FEATURES		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	9	21	Chi-square-7.680 p=0.005 SIGNIFICANT
2	UNIPOLAR (n=30)	1	29	

Thirty percent of bipolar depressive individuals exhibit psychotic features in comparison with only 3 % of unipolar depressive persons had psychotic features, and this difference found to be statistically significant (p=0.005).

TABLE 12

SUICIDAL IDEATION

S. No	SAMPLE	SUICIDAL IDEATION		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	11	19	Chi-square-4.267 p=0.03 SIGNIFICANT
2	UNIPOLAR (n=30)	19	11	

From the above table less no of bipolar depressive patients exhibit suicidal ideation when compared to the unipolar depressive patients. And this result found to be statistically significant (p=0.03).

TABLE 13**INITIAL INSOMNIA**

S. No	SAMPLE	INITIAL INSOMNIA		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	16	14	Chi-square-13.02 p=0.000
2	UNIPOLAR (n=30)	27	3	SIGNIFICANT

It is evident from this table that more no of unipolar depressive patients exhibit initial insomnia when compared to bipolar depressive patients, and this result was statistically significant (p=0.000).

TABLE 14**REDUCED SLEEP**

S. No	SAMPLE	REDUCED SLEEP		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	16	14	Chi-square-15.02 p=0.000 SIGNIFICANT
2	UNIPOLAR (n=30)	29	1	

It is observed, from this table that more no of unipolar depressive patients suffering from initial insomnia when compared to bipolar depressive patients, and this result was statistically significant (p=0.000).

TABLE 15**APPETITE LOSS**

S. No	SAMPLE	APETTITE LOSS		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	12	18	Chi-square-11.915 p=0.001 SIGNIFICANT
2	UNIPOLAR (n=30)	25	5	

It is clear from this table that more no of unipolar depressive patients suffer from loss of appetite when compared to bipolar depressive patients, and this result was statistically significant (p=0.001).

TABLE 16**INCREASED APPETITE**

S. No	SAMPLE	INCREASED APPETITE		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	9	21	Chi-square-7.680 p=0.006 SIGNIFICANT
2	UNIPOLAR (n=30)	1	29	

This table demonstrates more number of bipolar depressive patients exhibit increased appetite when compared to the unipolar depressive patients, and this result was statistically significant (p=0.006).

TABLE 17**ANHEDONIA**

S. No	SAMPLE	ANHEDONIA		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	15	15	Chi-square-15.02 p=0.000 SIGNIFICANT
2	UNIPOLAR (n=30)	2	28	

Fifty percent of bipolar depressive patients had a symptom of anhedonia compared to only six percent of unipolar depression had that particular symptom, and this different found to be statistically significant (p=0.000).

TABLE 18**SOCIAL WITHDRAWAL**

S. No	SAMPLE	SOCIAL WITHDRAWAL		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	9	21	Chi-square-22.50 p=0.000 SIGNIFICANT
2	UNIPOLAR (n=30)	27	3	

It is evident from the above table, that social withdrawal more associated with unipolar depression when compared to bipolar depression, and this result was statistically significant (p=0.000).

TABLE 19**TEARFULLNESS**

S. No	SAMPLE	TEARFULLNESS		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	4	26	Chi-square-26.786 p=0.000 SIGNIFICANT
2	UNIPOLAR (n=30)	24	6	

Tearfulness more associated with unipolar depression when compared to bipolar depression, and this result was statistically significant (p=0.000).

TABLE 20**IRRITABILITY**

S. No	SAMPLE	IRRITABILITY		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	21	9	Chi-square-15.152 p=0.000 SIGNIFICANT
2	UNIPOLAR (n=30)	6	24	

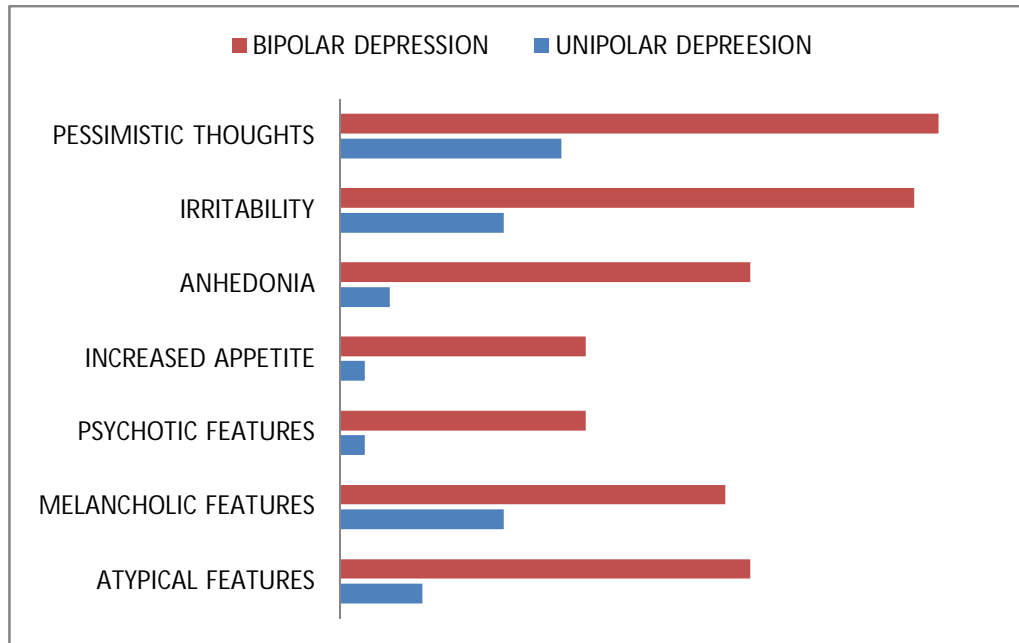
Seventy percent of the bipolar depressive patients were irritable when compared with unipolar depression where twenty percent of patients reported irritability. and this difference were statistically significant (p=0.000).

TABLE 21**PESSIMISTIC THOUGHTS**

S. No	SAMPLE	PESSIMISTIC THOUGHTS		SIGNIFICANCE
		YES	NO	
1	BIPOLAR (n=30)	22	8	Chi-square-13.06 p=0.000 SIGNIFICANT
2	UNIPOLAR (n=30)	8	22	

More number of bipolar depressive patients (73%) reported pessimistic thoughts when compared to unipolar depression (27%), and this result found to be statistically significant (p=0.000).

CLINICAL CHARECTERISTICS ASSOCIATED WITH BIPOLAR DEPRESSION



CLINICAL CHARECTERISTICS ASSOCIATED WITH UNIPOLAR DEPRESSION

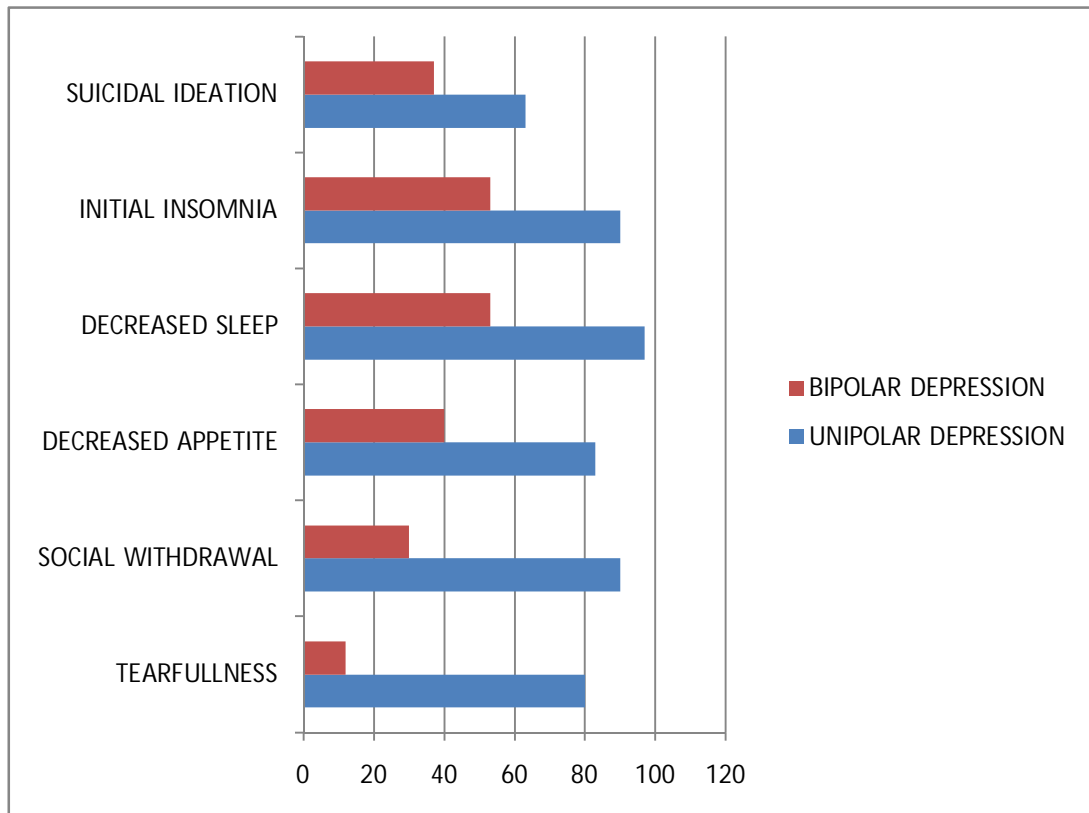


TABLE-23

**COMPARISON OF UNIPOLAR AND BIPOLAR GROUPS USING
DEPRESSION RATING SCALES**

HAMD AND MADRS

S . NO	RATING SCALES SCORE	GROUP				SIGNIFICANCE
		BIPOLAR DEPRESSION		UNIPOLAR DEPRESSION		
		Mean	SD	Mean	SD	
1	HAM-DRS	21.6	3.9	23.3	3.6	t=1.69 P=0.09 Not significant
2	MADRS	27.7	4.5	28.2	3.2	t=0.45 p=0.6 Not significant

Regarding severity of depression measured by rating scales there are no statistically significant different were found between two groups.

TABLE 24

**COMPARISON OF UNIPOLAR AND BIPOLAR GROUPS USING
HAMILTON ANXIETY RATING SCALE**

S .NO	RATING SCALES SCORE	GROUP				SIGNIFICANCE
		BIPOLAR DEPRESSION		UNIPOLAR DEPRESSION		
		Mean	SD	Mean	SD	
1	HAS	12	2.8	16.7	2.3	t=6.91 P=0.000 SIGNIFICANT

The mean total score of HAMILTON ANXIETY SCALE measured in both groups, unipolar depression group mean score were higher (16.7), when compared to bipolar depression group (12) and this result found to be statistically significant (p=0.000).

QUALITY OF LIFE

Comparing bipolar depression with unipolar depression for WHO QOL-BREF scale variables, it was observed that the following variables did not statistically significantly differ from each of these groups:

- a) Satisfaction of health
- b) Need for medical treatment
- c) Enjoying life
- d) Meaning in life
- e) Concentration
- f) Sad feelings in daily life
- g) Healthy physical environment
- h) Having energy in everyday life
- i) Accepting bodily appearance
- j) Money to lead life
- k) Adequate information
- l) Opportunities for leisure activities
- m) Ability to get around
- n) Capacity for work
- o) Satisfaction with oneself
- p) Satisfaction with personal relationship
- q) Access to health services
- r) Transportation
- s) Psychological health domain
- t) Environment domain

Regarding following variables, there was statistically significant different were found between bipolar and unipolar groups:

TABLE 25

SUBJECTIVE RATING OF QUALITY OF LIFE

S. No	SUBJECTIVE RATING OF QUALITY OF LIFE	SAMPLE		SIGNIFICANCE
		BIPOLAR DEPRESSION (n=30)	UNIPOLAR DEPRESSION (n=30)	
1	POOR/VERY POOR	22	10	Chi-square-8.1 P=0.004
2	NEUTRL/GOOD	8	20	SIGNIFICANT

About 75 % of bipolar depressive rating their quality life as very poor and poor, whereas 67% of unipolar depressives reported their quality of life as neither poor and nor good and good and this result was statistically significant (p=0.004).

SUBJECTIVE RATING OF QUALITY OF LIFE

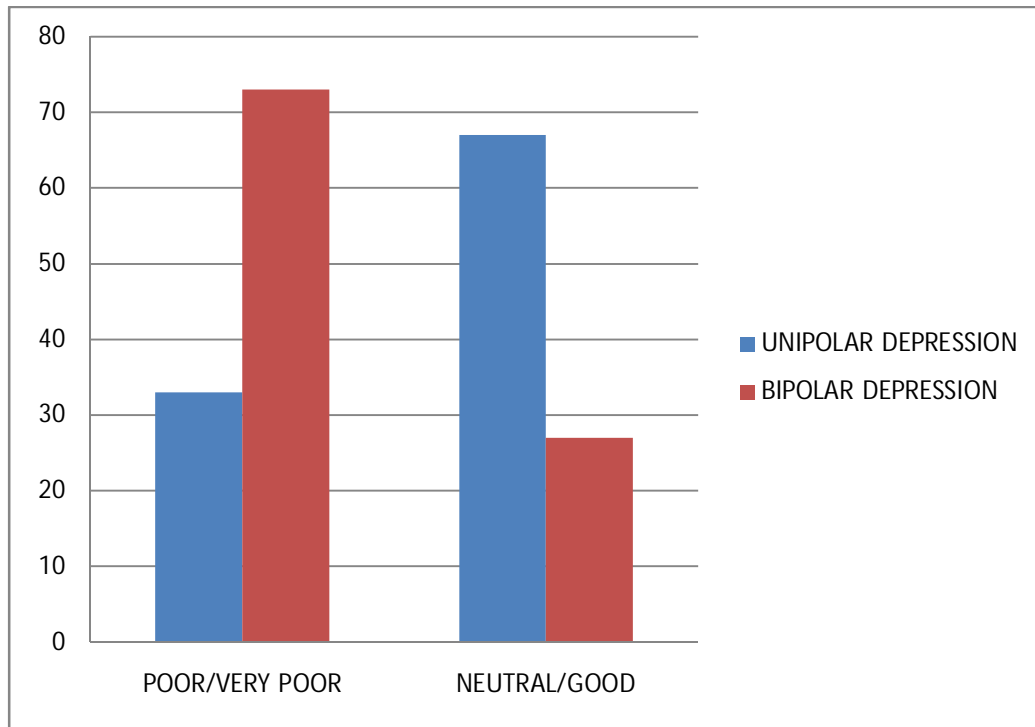


TABLE 26**SATISFACTION WITH SLEEP**

S. No	SATISFACTION WITH SLEEP	SAMPLE		SIGNIFICANCE
		BIPOLAR DEPRESSION (n=30)	UNIPOLAR DEPRESSION (n=30)	
1	DISATISFIED	16	29	Chi-square-15.02 P=0.000 SIGNIFICANT
2	NEUTRL/SATISFIED	14	1	

Ninety seven percent of unipolar depressives were not satisfied with their sleep for past 4 weeks period compare to bipolar depression where about 50% of them reported their sleep as neutral or good and this result was statistically significant ($p=0.000$).

TABLE 27**SATISFACTION WITH SEX**

S. No	SATISFACTION WITH SEX	SAMPLE		SIGNIFICANCE
		BIPOLAR DEPRESSION (n=30)	UNIPOLAR DEPRESSION (n=30)	
1	DISATISFIED	10	2	Chi-square-2.69 P=0.02 SIGNIFICANT
2	NEUTRL/SATISFIED	20	28	

Compare with bipolar depressives more number of unipolar depressives were satisfied with their sexual performance and this result was statistically significant (p=0.02).

TABLE 28

SATISFACTION WITH CONDITION OF LIVING PLACE

S. No	SATISFACTION WITH LIVING PLACE	SAMPLE		SIGNIFICANCE
		BIPOLAR DEPRESSION (n=30)	UNIPOLAR DEPRESSION (n=30)	
1	DISATISFIED	9	2	Chi-square-4.01 P=0.045 SIGNIFICANT
2	NEUTRL/SATISFIED	21	28	

Compare to unipolar depression more no of bipolar depressives reported that they were dissatisfied with their living place, and this result found to have statistically significant ($p=0.04$).

TABLE 29

EXPERIENCE OF NEGATIVE FEELINGS

S. No	EXPERIENCE OF NEGATIVE FEELINGS	SAMPLE		SIGNIFICANCE
		BIPOLAR DEPRESSION (n=30)	UNIPOLAR DEPRESSION (n=30)	
1	VERY OFTEN	17	0	Chi-square-6.19 P=0.000 SIGNIFICANT
2	QUITE OFTEN/SELDOM	13	30	

Bipolar depressives very often experience negative feelings such as blue moon, despair, anxiety when compared to unipolar depression and this difference found to have statistically significant ($p=0.000$).

TABLE-30

MEANS RAW SCORE IN PHYSICAL HEALTH DOMAIN

S. No	SAMPLE	PHYSICAL HEALTH		SIGNIFICANCE
		MEAN	SD	
1	BIPOLAR	15.3	3	T=2.23 P=0.02 SIGNIFICANT
2	UNIPOLAR	16.7	1.7	

Compared to unipolar depression bipolar depressives had lower mean score in physical health domain, and this difference in impairment was statistically significant (p=0.02).

TABLE-31**MEANS RAW SCORE IN SOCIAL RELATIONSHIP DOMAIN**

S. No	SAMPLE	SOCIAL RELATIONSHIP		SIGNIFICANCE
		MEAN	SD	
1	BIPOLAR	7.2	1.4	t=4.11 p=0.0001 SIGNIFICANT
2	UNIPOLAR	8.4	0.9	

Compared to unipolar depression bipolar depressives had lower mean score in physical health domain, and this difference in impairment was statistically significant (p=0.0001).

DISCUSSION

A comparison was made between bipolar (n=30) and unipolar depressives (n=30).

Compared with unipolar depressives bipolar depressives had an earlier age of onset of illness (median age of 28 years in bipolar depression versus median age of 33 in unipolar depression); and bipolar depressives are often engaged in private company jobs compared with unipolar who were engaged as laborers.

Clinical characteristics of the individuals with bipolar depression were different from the unipolar depression. The clinical profile included, earlier age of onset of illness (consistent with Weissman et al., 1996), above one third of bipolar depressives had the onset of illness during the post partum period (consistent with Rybakowski J et al (2004)) and the duration of current episode was shorter in bipolar depression (less than 1 month duration) compare with unipolar depression (2 months duration), the bipolar depressives had a median of 2 episode in past one year, whereas in unipolar current episode is one who experience in the last one year.

The above results goes in accordance with the studies of Furukawa et al., 2000; Mitchell et al., 1992; Roy-Byrne et al., 1985, Winokur G et al.

Bipolar depressives had a family history of mental illness more often than unipolar depression (50% versus 3.3%) but family history of substance use and suicide were comparable between 2 groups.

The above results consistent with the studies of Gassab et al, 2005, Akiskal 1993, Benazzi F, 2000; Ben Alba T, 2006; Rybakowski et al, 2004, Mitchell et al, 2001; Parker et al, 2000.

Most prominent difference between two groups was observed in atypical clinical characteristics where half of the bipolar depressives exhibited atypical clinical features but only 1 in 10 unipolar depressives had atypical features, in addition, the bipolar depressives reveals more melancholic and psychotic features.

The above results consistent with the studies of Depue & Monroe, 1978, Katz, Robins, Croughan, Secunda, & Swann, 1982.

In terms of specific clinical symptoms irritability was prevalent more among bipolar depressives in that 70% of them exhibited this

clinical symptom, more over pessimistic thoughts were frequent among nearly about 75% of bipolar depressives.

Anhedonia is also reported by 50 % of the patients with bipolar depression, atypical features such as appetite gain (30%), increased sleep (47%) more often seen among bipolar depressive patients. This finding goes accordance with Parker et al (2000)

On the other hand, the clinical profile of unipolar depressives was characterized by the following symptom profile:

1. Reduced sleep (54%)
2. Tearfulness (80%)
3. Suicidal ideation (63%)
4. Social withdrawal (90%)
5. Loss of appetite (83%)
6. Initial insomnia (90%)

These results were consistent with studies of Papadimitriou GN et al, (2002).

The two groups were comparable for severity of depression as reflected by ratings on Hamilton Depression Rating Scale (HAMD) and Montgomery- Asberg Depression rating Scale (MADRS), whereas unipolar depressives exhibited more total anxiety score as measured by Hamilton Anxiety Scale (HAS).

The above results consistent with the studies of Mitchel PB, Wilhelm et al, (2001) reported that although the bipolar patients were no more severely depressed than with unipolar depressed controls.

These results inconsistent with Vieta E et al, (2008) where he found HRSD score were statistically higher in unipolar patients than with bipolar patients

Quality of life is the paramount importance in the depressive disorder as it causes significant burden in the patient's life.

WHOQOL-BREF is the detailed assessment procedure for evaluating quality of life, on using this we found both depressive disorder interfere with quality of life to a greater extent , different were found among these groups were:

Compare with unipolar depressive persons, more number of bipolar depressives reported their quality of life as very poor and poor, more dissatisfaction with their sexual life, not at all satisfied with performance in daily activities, experiencing negative feelings such as blue moon, despair and anxiety as very often and had significant impairment in physical health and social relationship domains.

This finding goes accordance with studies of Hema Tharoor et al, (2008) Kettar JA et al (2010) Brieger P, et al (2004),

In comparison unipolar depressives had more dissatisfaction with their sleep.

This study, primarily assessed current clinical symptoms, clinically as well as using rating scales going by the total psychopathology, both groups seems to exhibit number of psychopathological symptoms. Yet differences could be observed in the clinical profiles of the individuals, presence of atypical symptoms, melancholic and psychotic features, clinical symptoms like irritability, anhedonia, pessimistic thoughts and increased appetite points to bipolar depression, whereas unipolar depressives had classical symptoms like less appetite, initial insomnia, reduced sleep, social withdrawal, suicidal ideation and tearfulness.

The course of bipolar disorder was characterized by family history of mental illness, younger age group, early onset, more number episode in the last year and shorter duration of episode. The total scores in the rating scales for depression is not different between 2 groups, whereas unipolar depression group had higher mean anxiety score measured by HAS.

Even though the literature reports bipolar depression to have more severe depressive disorder, all findings only reveal more disturbances in interference with activities of daily life.

In addition, bipolar depressives very often experienced negative feelings such as despair, severe emotional distress more often in last one month, additionally they were dissatisfied with their sexual life.

One of our finding not consistent with the existent literature is suicidal ideation, it is reported to be present more often in bipolar depression rather than unipolar depression as it is link to impulsivity, in addition, bipolar depressives in the literature had more history of substance abuse, in particular alcohol a factor which is contributes suicidal behavior, but in our sample history of substance abuse comparable between two groups and suicidal ideation more in unipolar depression in that 63 % of the unipolar experienced suicidal ideation in compare with 37 % of bipolar depressives. Large sample size will through light on this issue.

LIMITATION

- I. This comparative study was carried out in the psychiatry department at tertiary level hospital, thus the sample population is truly not representative of bipolar and unipolar depressives in the community, thus one should be careful in generalizing finding of this study.
- II. Further only a total number of 30 patients could be included in both groups. A larger sample size, recruiting cases from community could have been ideal, because of time and resources limitation did not permit this.
- III. Given the bipolar depression is episodic so a longitudinal study design is more appropriate for characterizing the course and its impact on various spheres on individual, but such a follow-up study is not possible in given time limitation.

SUMMARY AND CONCLUSION

A Comparative study of individual with bipolar and unipolar depression was carried out at the psychiatry outpatient department of Stanley Medical College, Chennai. Objective of this study was to describe socio demographic and clinical characteristics of two groups of depressive disorder, and to assess the quality of life of individual with bipolar and unipolar depression.

Persons satisfying ICD-10 criteria for bipolar depression recruited as cases (n=30), and match with unipolar depression as per as ICD-10 as control (n=30).

Study subjects were recruited consequently from the outpatient department of same hospital.

Cases and controls interviewed using structural clinical interview schedule and for assessed quality of life using WHOQOL-BREF.

Both cases and controls were administered following rating scales to assess depression and anxiety.

Compared with patients with unipolar depression, bipolar depressive patients are young, employed in private companies, had family history of mental illness, onset at post partum period, more median episode in the past one year and shorter duration of current

episode. The clinical features of bipolar depression was characterized by atypical features, melancholia and psychotic features, the clinical symptoms that are more frequently associated with bipolar depression includes irritability, anhedonia, increased appetite and pessimistic thoughts.

On the other hand, unipolar depression exhibited typical clinical characteristics of depression such as tearfulness, reduced sleep, early insomnia, decreased appetite and suicidal ideation, in addition, total anxiety as measured by the Hamilton Anxiety Scale have significantly higher among unipolar depressive patients.

Evaluation with quality of life scale reveals that both group of patients had impaired quality of life, but quality of life was significantly more impaired in bipolar depression, bipolar depressive patients rated their quality of life as very poor and poor, in addition, bipolar depressive patients had dissatisfaction with sexual life and activities of daily life and expressing negative feelings more often, more impairment in physical health and social relationship domain. All features signifying severity, burden of illness and impacting quality of life.

Given the early onset, episodic nature of the illness and more severe impact on quality of life, it is clinically important to recognizing this disabling disorder early and intervenes effectively with evidence based intervention.

Early effective intervention is likely to reduce number of episodes, maintain stability and decrease burden of disease.

While initial assessment patients with depressive symptoms it is important to look for atypical clinical features such as irritability and reverse neurovegetative symptoms, and also look for melancholic features and psychotic features that should point to diagnosis of bipolar depression. As the treatment of unipolar depression and bipolar depression is different in terms of choice of medication to manage, it is important to recognize early and initial appropriate treatment, literature as well as clinical experience emphasize the need of consider mood stabilizer and second generation anti psychotics for the management of bipolar depression rather than the use conventional anti depressant, given the potential to triggers manic symptoms, use of anti depressant should be judicious in the patients suspected bipolar depression, moreover literature suggest the use of specific mood stabilizer lamotrigene for the treatment of bipolar depression.

In order to provide effective and appropriate medication it is necessary to careful assessment of depressive symptoms which is carried out to establish diagnosis.

BIBLIOGRAPHY

1. Judd LL, Akiskal HS, Schettler PJ et al. The long-term natural history of the weekly symptomatic status of bipolar I disorder. *Arch Gen Psychiatry* 2002;
2. Judd LL, Akiskal HS, Schettler PJ et al. A prospective investigation of the natural history of the long-term weekly symptomatic status of bipolar II disorder. *Arch Gen Psychiatry* 2003; 60: 261–269.
3. Kupka RW, Altshuler LL, Nolen WA et al. Three times more days depressed than manic or hypomanic in both bipolar I and bipolar II disorder. *Bipolar Disord* 2007; 9: 531–535.
4. Leverich GS, Altshuler LL, Frye MA et al. Risk of switch in mood polarity to hypomania or mania in patients with bipolar depression during acute and continuation trials of venlafaxine, sertraline, and bupropion as adjuncts to mood stabilizers. *Am J Psychiatry* 2006; 163: 232–239.
5. Bauer MS, Kirk GF, Gavin C, Williford WO. Determinants of functional outcome and healthcare costs in bipolar disorder: a high-intensity follow-up study. *J Affect Disord* 2001;65:231–241.

6. Bryant-Comstock L, Stender M, Devercelli G. Health care utilization and costs among privately insured patients with bipolar I disorder. *Bipolar Disord* 2002; 4: 398–405.
7. Altshuler LL, Gitlin MJ, Mintz J, Leight KL, Frye MA. Subsyndromal depression is associated with functional impairment inpatients with bipolar disorder. *J Clin Psychiatry* 2002; 63: 807–811.
8. Judd LL, Akiskal HS, Schettler PJ et al. Psychosocial disability in the course of bipolar I and II disorders: a prospective, comparative, longitudinal study. *Arch Gen Psychiatry* 2005; 62: 1322–1330.
9. Kinkelin M. Course and prognosis in manic-depressive psychosis. *Schweiz Arch Neurol Psychiatr* 1954; 73: 100– 146.
10. Andreasen NC, Grove WM, Endicott J et al. The phenomenology of depression. *Psychiatr Psychobiol* 1988; 3: 1–10.
11. Solomon DA, Leon AC, Maser JD et al. Distinguishing bipolar major depression from unipolar major depression with the screening assessment of depression-polarity (SAD-P). *J Clin Psychiatry* 2006; 67: 434–442.

12. Roy-Byrne PR, Post RM, Uhde TW et al. The longitudinal course of recurrent affective illness: life chart data from research patients at the NIMH. *Acta Psychiatr Scand* 1985; 71: S1–S32.
13. Ahearn EP, Carroll BJ. Short-term variability of mood ratings in unipolar and bipolar depressed patients. *J Affect Disord* 1996; 36: 107–115.
14. Dorz S, Borgherini G, Conforti D, Scarso C, Magni G. Depression in inpatients: bipolar vs. unipolar. *Psychol Rep* 2003; 92: 1031–1039.
15. Mitchell PB, Malhi GS. Bipolar depression: phenomenological overview and clinical characteristics. *Bipolar Disord* 2004;6: 530–539.
16. Cuellar AK, Johnson SL, Winters R. Distinctions between bipolar and unipolar depression. *Clin Psychol Rev* 2005; 25: 307–339.
17. Mansell W, Colom F, Scott J. The nature and treatment of depression in bipolar disorder: a review and implications for future psychological investigation. *Clin Psychol Rev* 2005; 25: 1076–1100.

18. Schweitzer I, Maguire K, Ng CH. Should bipolar disorder be viewed as manic disorder
19. Parker G, Roy K, Wilhelm K, Mitchell P, Hadzi-Pavlovic D. The nature of bipolar depression: implications for the definition of melancholia. *J Affect Disord* 2000;
21. Parker G, Hadzi-Pavlovic D, Boyce P et al. Classifying depression by mental state signs. *Br J Psychiatry* 1990;157:55–64.
22. Parker G, Hadzi-Pavlovic D, Wilhelm K et al. Defining melancholia: properties of a refined sign-based measure. *Br J Psychiatry* 1994; 164: 316–326.
23. Mitchell PB, Wilhelm K, Parker G, Austin M-P, Rutgers P, Malhi GS. The clinical features of bipolar depression: a comparison with matched major depressive disorder patients. *J Clin Psychiatry* 2001; 62: 212– 216.
24. Olfson M, Das AK, Geleroff MJ et al. Bipolar depression in a low-income primary care clinic. *Am J Psychiatry* 2005; 162: 2146–2151.

25. Perlis RH, Brown E, Baker RW, Nierenberg AA. Clinical features of bipolar depression versus major depressive disorder in large multicentre trials. *Am J Psychiatry* 2006;
26. Goel N, Terman M, Terman JS. Depressive symptomatology differentiates subgroups of patients with seasonal affective disorder. *Depress Anxiety* 2002;
27. Papadimitriou GN, Dikeos DG, Daskalopoulou EG, Soldatos CR. Co-occurrence of disturbed sleep and appetite loss differentiates between unipolar and bipolar depression. *Prog Neuropsychopharmacol Biol Psychiatry* 2002; 26: 1041–1045.
28. Serretti A, Mandelli L, Lattuada E, Cusin C, Smeraldi E. Clinical and demographic features of mood disorder subtypes. *Psychiatry Res* 2002;
29. Benazzi F. Psychomotor changes in melancholic and atypical depression: unipolar and bipolar II subtypes. *Psychiatry Res* 2002; 112: 211–220.

30. Vieta E, Suppes T. Bipolar II disorder: arguments for and against a distinct diagnostic entity. *Bipolar Disord* 2008; 10: 163–178.
31. Angst J, Preisig M. Course of a clinical cohort of unipolar, bipolar and schizoaffective patients. Results of a prospective study from 1959 to 1985. *Arch Neurol Psychiatr* 1995;146: 5–16.
32. Akiskal HS, Walker P, Puzantian VR et al. Bipolar outcome in the course of depressive illness: phenomenologic, familial, and pharmacologic predictors. *J Affect Disord* 1983; 5: 115–128.
33. Coryell W, Endicott J, Maser JD. Long term stability of polarity distinctions in the affective disorders. *Am J Psychiatry* 1995; 152: 385–390.
34. Akiskal HS, Maser JD, Zeller PJ. Switching from _unipolar _ to _bipolar II_: an 11-year prospective study of clinical and temperamental predictors in 559 patients. *Arch Gen Psychiatry* 1995; 52: 114–123.
35. Strober M, Lampert C, Schmidt S, Morrell W. The course of major depressive disorder in adolescents: 1. Recovery and risk of manic switching in a follow-up of psychotic and nonpsychotic subtypes. *J Am Acad Child Adolesc Psychiatry* 1993; 32: 32–42.

36. Abrams R, Taylor MA. A comparison of unipolar and bipolar depressive illness. *Am J Psychiatry* 1980; 137: 1084–1087.
37. Coryell W, Keller M, Endicott J, Andreasen N, Clayton P, Hirschfeld R. Bipolar II illness: course and outcome over a five-year period. *Psychol Med* 1989; 19: 129–141.
38. Katz MM, Robins E, Croughan J, Secunda S, Swann A. Behavioural measurement and drug response characteristics of unipolar and bipolar depression. *Psychol Med* 1982; 12: 25–3
39. Brockington IF, Altman E, Hillier V, Meltzer HY, Nand S. The clinical picture of bipolar affective disorder in its depressed phase: a report from London and Chicago. *Br J Psychiatry* 1982; 141: 558–562.
40. Benazzi F. Symptoms of depression as possible markers of bipolar II disorder. *Prog Neuropsychopharmacol Biol Psychiatry* 2006; 30: 471–477.
41. Benazzi F. Clinical differences between bipolar II depression and unipolar major depressive disorder: lack of an effect of age. *J Affect Disord* 2003

42. Beigel A, Murphy DL. Unipolar and bipolar affective illness: differences in clinical characteristics accompanying depression. Arch Gen Psychiatry 1971; 44. Simon NM, Smoller JW, Fava M et al. Comparing anxiety disorders and anxiety-related traits in bipolar disorder and unipolar depression. J Psychiatr Res 2003; 37: 187–192.
45. Abrams R, Taylor MA. Unipolar and bipolar depressive illness. Arch Gen Psychiatry 1974; 30: 320–321.
46. Dunner DL, Dwyer T, Fieve RR. Depressive symptoms in patients with unipolar and bipolar affective disorder. Compr Psychiatry 1976; 17: 447–451.
47. Guze SB, Woodruff RA, Clayton PJ. The significance of psychotic affective disorders. Arch Gen Psychiatry 1975; 32: 1147–1150.
48. Strober M, Carlson G. Bipolar illness in adolescents with major depression: clinical, genetic, and psychopharmacologic predictors in a three-to four-year prospective followup investigation. Arch Gen Psychiatry 1982; 39: 549–555.

49. Goldberg JF, Harrow M, Whiteside JE. Risk for bipolar illness in patients initially hospitalized for unipolar depression. *Am J Psychiatry* 2001;
50. Geller B, Fox LW, Clark KA. Rate and predictors of prepubertal bipolarity during follow-up of 6- to 12-yearold depressed children. *J Am Acad Child Adolesc Psychiatry* 1994; 33: 461–468.
51. Endicott J, Nee J, Andreasen N, Clayton P, Keller M, Coryell W. Bipolar II: combine or keep separate? *J Affect Disord* 1985; 8: 17–28.
52. Black DW, Nasrallah A. Hallucinations and delusions in 1,715 patients with unipolar and bipolar affective disorders. *Psychopathology* 1989; 22: 28–34.
53. Kupfer DJ, Weiss BL, Foster FG, Detre TP, Delgado J, McPartland R. Psychomotor activity in affective states. *Arch Gen Psychiatry* 1974;
54. Perris C. A study of bipolar (manic-depressive) and unipolar recurrent depressive psychoses. *Acta Psychiatr Scand* 1966; 42: 1–189.

55. Popescu C, Ionescu R, Jipescu I. Psychomotor functioning in unipolar and bipolar affective disorders. *Rom J Neurol Psychiatry* 1991; 29: 17–33.
56. Kuhs H, Reschke D. Psychomotor activity in unipolar and bipolar depressive patients. *Psychopathology*
57. Black DW, Nasrallah A. Hallucinations and delusions in 1715 patients with unipolar and bipolar affective disorders. *Psychopathology* 1989;22(1):28–34. [PubMed: 2657835]
58. Brockington IF, Altman E, Hillier V, Meltzer HY, Nand S. The clinical picture of bipolar affective disorder in its depressive phase: A report from London and Chicago. *British Journal of Psychiatry* 1982;141:558–562. [PubMed: 7159802]
60. Depue RA, Monroe SM. The unipolar–bipolar distinction in the depressive disorders. *Psychological Bulletin* 1978;85:1001–1029. [PubMed: 704718]
61. Furukawa TA, Konno W, Morinobu S, Harai H, Kitamura T, Takahashi K. Course and outcome of depressive episodes: Comparison between bipolar, unipolar and subthreshold depression. *Psychiatry Research* 2000;96:211–220. [PubMed: 11084217]

62. Giles DE, Rush AJ, Roffwarg HP. Sleep parameters in bipolar I, bipolar II, and unipolar depressions. *Biological Psychiatry* 1986;21:1340–1343. [PubMed: 3756280]
63. Lester D. Suicidal behavior in bipolar and unipolar affective disorders: A meta-analysis. *Journal of Affective Disorders* 1993;27:117–121. [PubMed: 8440807]
64. Mitchell P, Wilhelm K, Parker G, Austin MP, Rutgers P, Malhi GS. The clinical features of bipolar depression: A comparison with matched major depressive disorder patients. *Journal of Clinical Psychiatry* 2001;62:212–216. [PubMed: 11305713]
65. Perris H. A study of bipolar and unipolar recurrent depressive psychoses. *Acta Psychiatrica Scandinavica* 1966; (Supplement): 194.
66. Weissman MM, Bland RC, Canino GJ, Fravelli C, Greenwald S, Hwu HG, et al. Cross-national epidemiology of major depression and bipolar disorder. *JAMA: The Journal of the American Medical Association* 1996;276:293–299.

APPENDIX - 6
CONSENT FORM

I was informed and explained of the purpose and nature of the study. I am willing to participate in this study. I hereby give my full consent for the study.

Signature of the Patient/Control

Name of the Patient/Control

Hamilton Rating Scale for Anxiety

Instructions: This checklist is to assist the physician or psychiatrist in evaluating each patient as to his degree of anxiety and pathological condition. Please fill in the appropriate rating:

NONE = 0 MILD = 1 MODERATE = 2 SEVERE = 3 SEVERE, GROSSLY
DISABLING = 4

Item		Rating	Item		Rating
Anxious	Worries, anticipation of the worst, fearful anticipation, irritability	_____	Somatic (sensory)	Tinnitus, blurring of vision, hot and cold flushes, feelings of weakness, pricking sensation	_____
Tension	Feelings of tension, fatigability, startle response, moved to tears easily, trembling, feelings of restlessness, inability to relax	_____			
			Cardiovascular symptoms	Tachycardia, palpitations, pain in chest, throbbing of vessels, fainting feelings, missing beat	_____
Fears	Of dark, of strangers, of being left alone, of animals, of traffic, of crowds	_____	Respiratory symptoms	Pressure or constriction in chest, choking feelings, sighing, dyspnea	_____
Insomnia	Difficulty in falling asleep, broken sleep, unsatisfying sleep and fatigue on waking, dreams, nightmares, night-terrors	_____	Gastrointestinal symptoms	Difficulty in swallowing, wind, abdominal pain, burning sensations, abdominal fullness, nausea, vomiting, borborygmi, looseness of bowels, loss of weight, constipation	_____

Intellectual (cognitive) Difficulty in concentration, poor memory

Genitourinary symptoms

Frequency of micturition, urgency of micturition, amenorrhea, menorrhagia, development of frigidity, premature ejaculation, loss of libido, impotence

Depressed mood Loss of interest, lack of pleasure in hobbies, depression, early waking, diurnal swing

Somatic (muscular) Pains and aches, twitching, stiffness, myoclonic jerks, grinding of teeth, unsteady voice, increased muscular tone

Autonomic symptoms

Dry mouth, flushing, pallor, tendency to sweat, giddiness, tension headache, raising of hair

Behavior at interview

Fidgeting, restlessness or pacing, tremor of hands, furrowed brow, strained face, sighing or rapid respiration, facial pallor, swallowing, belching, brisk tendon jerks, dilated pupils, exophthalmos

Hamilton Rating Scale for Depression

1: Depressed mood (sadness, hopeless, helpless, worthless)

- 0 Absent
- 1 These feeling states indicated only on questioning
- 2 These feeling states spontaneously reported verbally
- 3 Communicates feeling states nonverbally—i.e., through facial expression, posture, voice, and tendency to weep
- 4 Patient reports VIRTUALLY ONLY these feeling states in his spontaneous verbal and nonverbal communication

2: Feelings of guilt

- 0 Absent
- 1 Self-reproach, feels he has let people down
- 2 Ideas of guilt or rumination over past errors or sinful deeds
- 3 Present illness is a punishment. Delusions of guilt
- 4 Hears accusatory or denunciatory voices and/or experiences threatening visual hallucinations

3: Suicide

- 0 Absent
- 1 Feels life is not worth living
- 2 Wishes he were dead or any thoughts of possible death to self
- 3 Suicide ideas or gesture4 Attempts at suicide (any serious attempt rates 4)

4: Insomnia early

- 0 No difficulty falling asleep
- 1 Complains of occasional difficulty falling asleep—i.e., more than 1/4 hour
- 2 Complains of nightly difficulty falling asleep

5: Insomnia middle

- 0 No difficulty
- 1 Patient complains of being restless and disturbed during the night
- 2 Waking during the night—any getting out of bed rates 2 (except for purpose of voiding)

6: Insomnia late

- 0 No difficulty
- 1 Waking in early hours of the morning but goes back to sleep
- 2 Unable to fall asleep again if gets out of bed

7: Work and activities

- 0 No difficulty
- 1 Thoughts and feelings of incapacity, fatigue, or weakness related to activities, work, or hobbies
- 2 Loss of interest in activity, hobbies, or work—either directly reported by patient, or indirect in listlessness, indecision, and vacillation (feels he has to push self to work or activities)
- 3 Decrease in actual time spent in activities or decrease in productivity. In hospital, rate 3 if patient does not spend at least three hours a day in activities (hospital job or hobbies) exclusive of ward chores
- 4 Stopped working because of present illness. In hospital, rate 4 if patient engages in no activities except ward chores, or if patient fails to perform ward chores unassisted

8: Retardation (slowness of thought and speech; impaired ability to concentrate; decreased motor activity)

- 0 Normal speech and thought
- 1 Slight retardation at interview
- 2 Obvious retardation at interview
- 3 Interview difficult
- 4 Complete stupor

9: Agitation

- 0 None
- 1 “Playing with” hands, hair, etc.
- 2 Hand-wringing, nail biting, hair pulling, biting of lips

10: Anxiety psychic

- 0 No difficulty
- 1 Subjective tension and irritability
- 2 Worrying about minor matters
- 3 Apprehensive attitude apparent in face or speech
- 4 Fears expressed without questioning

11: Anxiety somatic

- | | | |
|---|----------------|---|
| 0 | Absent | Physiological concomitants of anxiety, such as: |
| 1 | Mild | Gastrointestinal—dry mouth, wind, indigestion, diarrhea, cramps, belching |
| 2 | Moderate | Cardiovascular—palpitations, headaches |
| 3 | Severe | |
| 4 | Incapacitating | Respiratory—hyperventilation, sighing Urinary frequency Sweating |

12: Somatic symptoms gastrointestinal

- | | |
|---|---|
| 0 | None |
| 1 | Loss of appetite but eating without staff encouragement. Heavy feelings in abdomen |
| 2 | Difficulty eating without staff urging; requests or requires laxatives or medication for bowels or medication for GI symptoms |

13: Somatic symptoms general

- | | |
|---|--|
| 0 | None |
| 1 | Heaviness in limbs, back or head. Backaches, headache, muscle aches. Loss of energy and fatigability |
| 2 | Any clear-cut symptom rates 2 |

14: Genital symptoms

- | | | |
|---|--------|------------------------|
| 0 | Absent | Symptoms such as: |
| 1 | Mild | Loss of libido |
| 2 | Severe | Menstrual disturbances |

15: Hypochondriasis

- | | |
|---|--|
| 0 | Not present |
| 1 | Self-absorption (bodily) |
| 2 | Preoccupation with health |
| 3 | Frequent complaints, requests for help, etc. |
| 4 | Hypochondriacal delusions |

16: Loss of weight

A When rating by history

0 No weight loss

1 Probable weight loss associated with present illness

2 Definite (according to patient) weight loss

B: On weekly ratings by ward psychiatrist, when actual weight changes are measured

0 Less than 1 lb weight loss in week

1 Greater than 1 lb weight loss in week

2 Greater than 2 lb weight loss in week

17: Insight

0 Acknowledges being depressed and ill

1 Acknowledges illness but attributes cause to bad food, climate, overwork, virus, need for rest, etc.

2 Denies being ill at all

18: Diurnal variation

AM PM

0 0 Absent

1 1 Mild

2 2 Severe

If symptoms are worse in the morning or evening, note which it is and rate severity of variation

19: Depersonalization and derealisation

0 Absent Such as:

1 Mild Feeling of unreality

2 Moderate Nihilistic ideas

3 Severe

4 Incapacitating

20: Paranoid symptoms

- 0 None
- 1 Suspiciousness
- 2 Ideas of reference
- 3 Delusions of reference and persecution

21: Obsessional and compulsive symptoms

- 0 Absent
- 1 Mild
- 2 Severe

22: Helplessness

- 0 Not present
- 1 Subjective feelings which are elicited only by inquiry
- 2 Patient volunteers his helpless feelings
- 3 Requires urging, guidance, and reassurance to accomplish ward chores or personal hygiene
- 4 Requires physical assistance for dress, grooming, eating, bedside tasks, or personal hygiene

23: Hopelessness

- 0 Not present
- 1 Intermittently doubts that “things will improve” but can be reassured
- 2 Consistently feels “hopeless” but accepts reassurances
- 3 Expresses feelings of discouragement, despair, pessimism about future, which cannot be dispelled
- 4 Spontaneously and inappropriately perseverates: “I’ll never get well” or its equivalent

24: Worthlessness (ranges from mild loss of esteem, feelings of inferiority, self-deprecation to delusional notions of worthlessness)

- 0 Not present
- 1 Indicates feelings of worthlessness (loss of self-esteem) only on questioning
- 2 Spontaneously indicates feelings of worthlessness (loss of self-esteem)
- 3 Different from 2 by degree. Patient volunteers that he is “no good,” “inferior,” etc.
- 4 Delusional notions of worthlessness—i.e., “I am a heap of garbage” or its equivalent

SECTION B CLINICAL CHARACTERISTICS

1. Age of onset :
2. Type :
3. Duration :
4. No of episode in previous 12 months :
5. Duration :
6. Post partum onset :

A. Family history

1. Mental illness :
2. Substance abuse :
3. Wandering :
4. Suspiciousness :
5. Suicide/suicidal attempt :

Clinical characteristics of current episode

A. Atypical features

- a) Mood reactivity :
- B) Two (or more) of the following
 - I. Increase in appetite :
 - II. Hypersomnia :
 - III. Lethargy :
 - IV. Long standing pattern of :
 - V. Interpersonal rejection :

B)Melancholic features

A)

Lack of pleasure in all almost all activities :

Lack of reactivity to pleasurable stimuli :

Depressed mood :

Depression worse in the morning :

Early morning awakening :

Psychomotorretardation/agitation :

Weight loss :

Excessive inappropriate guilt :

Psychotic features

Irritability/anger attack :

Delusion :

Hallucination :

Substance abuse

Substance

Harmfuluse/abuse/dependence :

Co morbid psychiatric illness :

Co morbid physical illness :